

A new Japygid Species from Bermudas *Parajapyx (Parajapyx) schusteri* n. sp. (Insecta, Diplura)

by

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With 5 figures

ABSTRACT

The new species from Burt Island, Bermudas, is described and figured. It belongs to the "*isabellae*"-group.

Parajapyx (Parajapyx) schusteri n.sp.

Holotype ♀ stage V from Bermudas, Burt Island, August 1977, R. Schuster legit. Holotype with 2 paratypes mounted in Swan's medium kept in Muséum d'Histoire naturelle de Genève and 11 specimens in alcohol kept in R. Schuster collection.

Length of body measured within antennae with cerci 4-4.5 mm.

Head. Antennae consisting of 20 articles. The terminal article with 4 placoid sensillae. Mouthparts typical for genus. Labium see Fig. 3Q.

Thorax. Dorsal side. Pronotum with 5+5 *M* (macrochaetae) and 3+3 *s* (typical setae) (Fig. 1A). Mesonotum: praescutum with 1+1 setae; scutum with 5+5 *M*, 5+5 *s* and about of 14+14 *ss* (supplementary setae) (Fig. 1B). Metanotum with 1+1 enough long setae and 2+2 short setae; chaetotaxy of scutum agrees with that of mesonotal scutum.

Ventral side. Prosternum: praesternite 2+2 setae, lateropleurite 1+1 setae, merosternite 3+3 setae, median part of sternite 1+2+1 setae, and infracoxal area with 4+4 setae (Fig. 4R). Mesosternum (praesternite 4+1+4, lateropleurite 1+1, merosternite 4+4, median part of sternite 5+3+5, infracoxal area with 7+7 setae (Fig. 4S). Metasternum: praesternite 5+5, lateropleurite 1+1, merosternite 4+4, median part of sternite 5+4+5, infracoxal area with 7+7 setae (Fig. 4T).

Legs. The sternal apical setae of tarsus 1+1 in number are simple (Fig. 3F).

Abdomen. Terga. Tergum I: praescutum 3+3 setae, scutum 5+5 *M*, 6+6 *s*, and 6+6 supplementary setae. Terga II-VII: praescutum 3+3 setae, scutum 8+8 *M*, 7+7 *s*, and about of 7+7 *ss*. Tergum VIII: 7+7 *M*, 4+4 *s*, 4+2+4 *ss* (Fig. 3G). Tergum IX: 3+3 *M*, and 2+2 *s*. Tergum X: 7+1+7 *M*, 5+5 *s*, and 1 seta near *M*₂

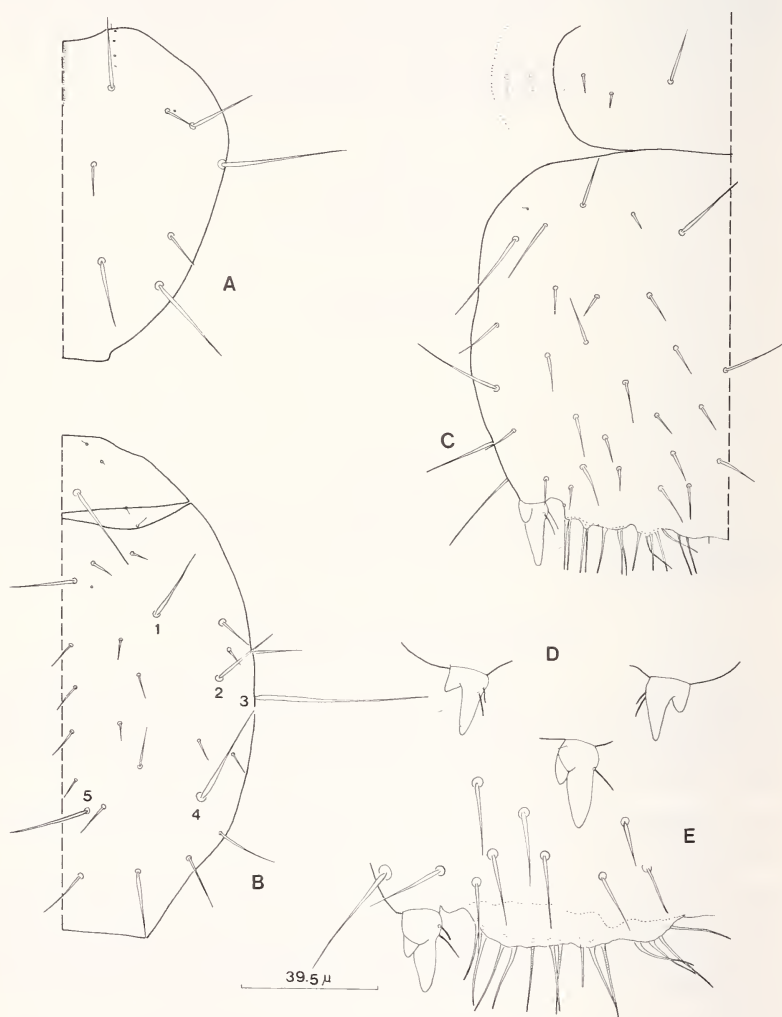


FIG. 1.

Parajapyx (*P.*) *schusteri* n. sp.:

- A. Pronotum (♀ paratype). — B. Mesonotum (♀ paratype). —
C. Right half of urosternite I (♀ holotype). — D. Styli (♀ holotype). —
E. Subcoxal organ (♀ holotype): scale for this figure only.

on each side. Some deviation in chaetotaxy of supplementary setae as well as in typical setae were observed.

Acrogynium triangular (Fig. 3M).

Sterna. Sternum I: praescutum 7+7 setae, scutum 10+10 *M*, 3+1+3 *s*, others are *ss* (Fig. 1C). Sterna II-VII: praescutum 7+7 setae, scutum 12+12 *M*, 8+4+8 *s*, and 5+5 *ss*.

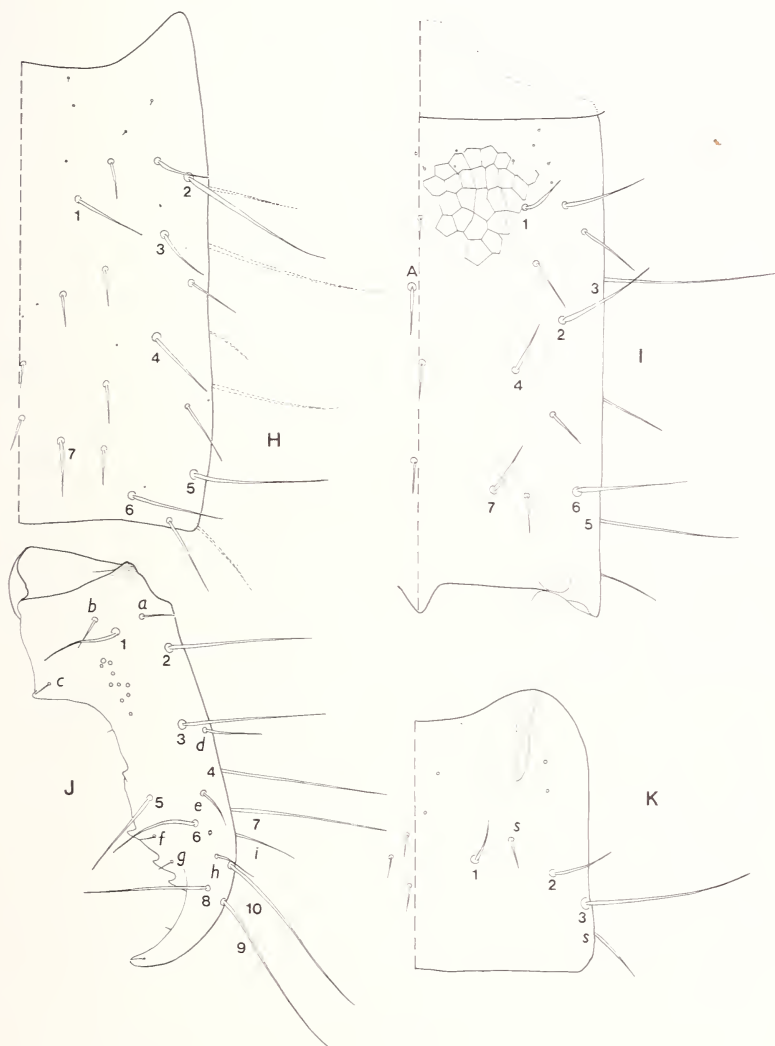


FIG. 2.

Parajapyx (P.) schusteri n. sp.:

H. Urotergite VIII (♀ paratype). — I. Urotergite X (♀ paratype). — J. Right cercus of forceps (♀ paratype). — K. Urotergite IX (♀ paratype).

Styli longish with distinct secondary cone (Fig. 1D), $s_1 : st_1$ as 8 : 24 (Fig. 1E). Subcoxal organ occupies a third part of width between styli. Glandular setae 10-13 in number as long as styli; 4 sensory setae are present (Fig. 1E).

Spermatheca distinct (Fig. 4U).

Hypopygium. Sinus relatively large armed with 6 tubercles (Fig. 3N).

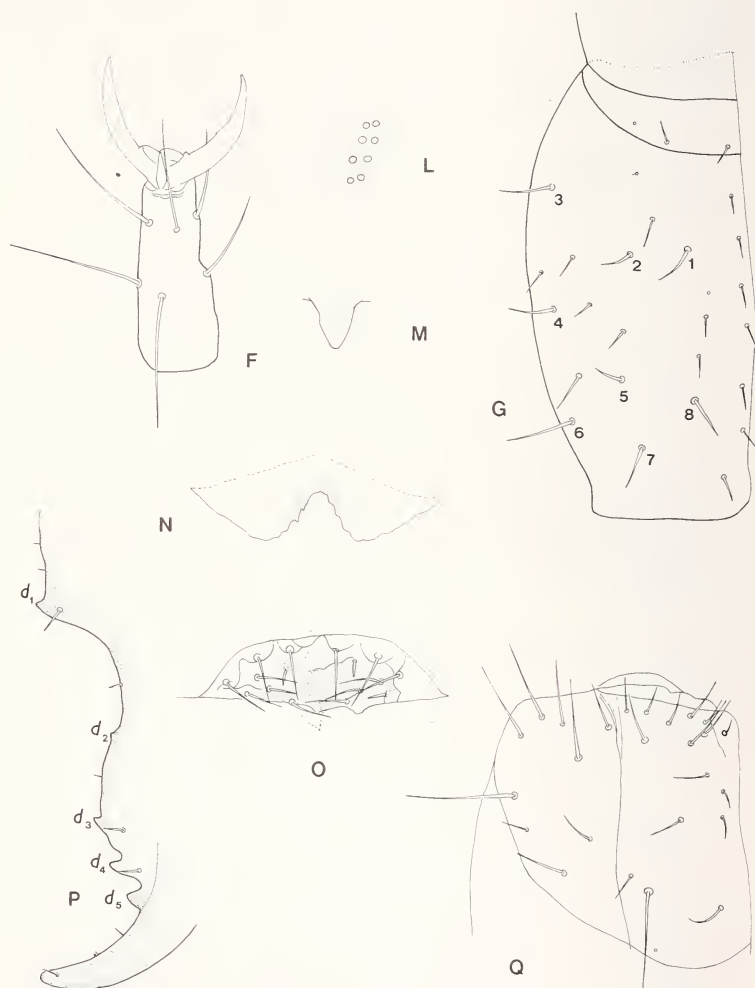


FIG. 3.

Parajapyx (P.) schusteri n. sp.:

- F. Apical part of third leg dorsally (♀ paratype). — G. Urotergite VII (♀ holotype). — L. Evaporation pores of cercus (♀ holotype). — M. Acrogygium (♀ holotype). — N. Hypopygium (♀ holotype). — O. Genital papilla (♀ holotype). — P. Internal margin of cercus (♀ paratype). — Q. Right side of labium (♀ holotype).

Ratios: Terg. VIII, L : W as 104 : 114; Terg. IX, L : W as 84 : 106; Terg. X, L : W as 177 : 108. Measured sensu PAGÉS (1953), the setae are designated sensu PAGÉS (1952a).

Cerci. Dentes d_1 and d_2 shorter than d_3 , d_4 and d_5 . Interval between d_2 and d_3 seems to be identical with that of d_3 - d_5 . Pores of evaporation present 8-10 in number (Figs 2J, 3L) and 1 pore near seta 6 (Fig. 2J).

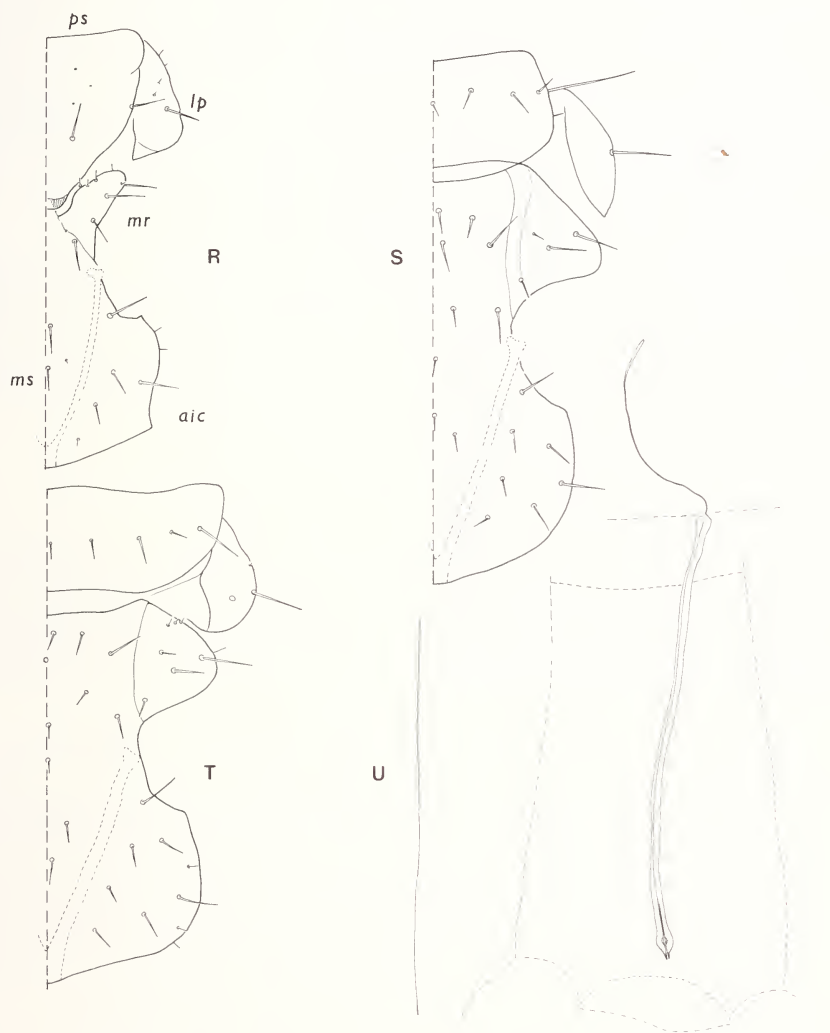


FIG. 4.

Parajapyx (P.) schusteri n. sp.:

R. Prosternum (♂ holotype): ps = praesternite, lp = lateropleurite, mr = merosternite, ms = median part of sternite, aic = area infracoxalis. — S. Mesosternum (♂ holotype). — T. Metasternum (♂ holotype). — U. Spermatheca (♂ holotype).



Affinity.

The new species belongs to the "*isabellae*"-group but differs from members of this group in thoracic chaetotaxy as well as in chaetotaxy of abdominal terga VIII+X. The apical part of legs as in *Parajapyx* (*P.*) *normandi* Pagés, 1952b.

Derivatio nominis. Named in honour of Prof. Dr. R. Schuster, Institute of Zoology, University Graz.

Localities from where this species is known: Bermudas, Whalebone Bay, Burt Island and northern from Lodge Point. 15 specimens were found (July-August 1977).

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FIG. 5.

Parajapyx (*P.*) *schusteri* n. sp.

REFERENCES

- PAGES, J. 1952a. Parajapyginae (Insecta, Entotrophi, Japygidae) de l'Angola. *Publções cult. Co. Diam. Angola* 13: 53-96.
- 1952b. Contribution à l'étude des Japygidae (Insecta Entotrophi) d'Algérie et de Tunisie. *Bull. Soc. zool. Fr.* 77: 125-148.
- 1953. Japyginae (Japygidae, Insecta Diplura) de la Yougoslavie et des régions limitrophes. *Bull. Mus. Hist. nat. Pays Serbe*, Sér. B, book. 5-6: 235-264.

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